

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Satoru NIPPA

Serial No. : 09/708,519

Group Art Unit: 1714

Filed: November 9, 2000

Examiner: Callie E. Shosho

For: RESIN COMPOSITE AND METHOD FOR PRODUCING THE SAME

DECLARATION OF SATORU NIPPA UNDER 37 C.F.R. 1.132

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

I, Satoru NIPPA, residing at 13-244,

Kitashin-machi, Niihama-shi, Ehime-ken, Japan, hereby  
declare and say as follows:

1) I am an inventor of the above-identified  
application;

2) I finished a Master Course in the Graduate  
School of Engineering in Osaka University and received a  
master's degree from the Department of Applied Chemistry  
thereof in March 1990;

3) Since April 1990 to the present, I have been  
employed by Sumitomo Chemical Co., Ltd., assignee of the  
above-identified application, and engaged in research and  
development in the field of inorganic chemistry; and

4) I read the Office Action issued on October  
15, 2002 in the above-identified application, and the art  
references cited therein. Then, I carried out experiments



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to examine whether or not, resin composites disclosed in USP 4,491,553 are similar to that of the above-identified application. I beg to report the results of the experiments below.

## EXPERIMENTS

### Experiment 1

A resin composite was prepared by mixing in a kneader (trade name: Labo Plastomill model 20-200C, blade: B-75, manufactured by Toyo Seiki Seisakusyo Co., Ltd.) with 41g (87 parts) of styrene-butadiene rubber (trade name: HS-1, manufactured by Sumitomo Chemical Co., Ltd.), 6 g (13 parts) of aluminum hydroxide powder (crystalline structure: boehmite, average primary-particle diameter: 13nm) obtained by hydrolysis of aluminum alkoxide followed by drying and 0.15g (0.3 parts) of fibrillatable PTFE (trade name: F-104, manufactured by Daikin Industries, LTD), and shaping by compression molding in a press of 9.8MPa at 170°C.

Using obtained resin composite, an index Y/X (in page 15 lines 17-25 of this specification) and filler dispersion (in page 5 col.9 lines 7-9 of USP 4,491,553) were measured. The results are shown in Table below.

### Experiment 2

The same processes as in Experiment 1 were carried out except that, fibrillatable PTFE was not added. Using obtained resin composite, above-mentioned properties of obtained resin composite

was measured. The results are shown in Table below.

Table

|                   | Experiment 1 | Experiment 2 |
|-------------------|--------------|--------------|
| Index Y/X         | 0.11         | 0.12         |
| Filler dispersion | good         | good         |

It was recognized that, both of the resin composites utilized in Experiment 1 and 2 are good in filler dispersion.

Neither of the resin composites has an index Y/X of 0.1 or less.

I, the undersigned, declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so that made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

*Satoru Nippa*  
Satoru NIPPA

Dated this 7th day of April, 2003